AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A fluid spray head assembly comprising:

a spray head comprising an expulsion channel (5) provided with a spray orifice (1) and a spray profile (10) formed in an end wall of said spray head, said spray profile (10) comprising ~~preferably~~ non-radial spray channels (11) opening out to a central spray chamber (12) disposed directly upstream from said spray orifice (1); ~~and~~

an insert (20) forming an internal nozzle, the insert being introduced through the inside of the spray head and being disposed in said expulsion channel (5) so as to form a base surface for said spray profile (10), the central axis (X) of said insert (20) being substantially identical to the central axis (Y) of said expulsion channel (5); and

~~wherein~~ said spray head ~~comprises~~comprising centering means for centering said insert (20), ~~wherein~~ said expulsion channel (5) ~~includes~~including said centering means for centering said insert (20), ~~and in that~~ said centering means ~~are~~ formed on a surface of the spray head that forms the expulsion channel at a location ~~immediately~~directly adjacent to a top end of the insert, ~~wherein~~ the top end of the insert ~~faces~~facing the spray profile (10) formed in the end wall of the spray head;

wherein the central spray chamber is between the spray orifice of the spray head and the insert; and

wherein the insert is formed separately from the spray head.

2. (previously presented): A spray head assembly according to claim 1, in which said centering means comprise at least one projection (30), the diameter of the inscribed circle defined by said projections being substantially identical to the diameter of the insert (20).

3. (previously presented): A spray head assembly according to claim 2, in which the expulsion channel (5) includes three flat surfaces (30) that are distributed symmetrically about said channel, said flat surfaces (30) co-operating with said insert (20) so as to center it relative to said expulsion channel (5).

4. (previously presented): A spray head assembly according to claim 2, in which the accesses of the expulsion channel (5) to the spray channels (11) are formed between said projections.

5. (previously presented): A spray head assembly according to claim 1, in which the central axis (X) of said insert (20) is offset from the central axis (Y) of the expulsion channel (5) by a distance that is less than 0.08 mm, and preferably less than 0.03 mm.

6. (previously presented): A spray head assembly according to claim 1, in which said spray chamber (12) has a diameter of 1 mm.

7. (previously presented): A spray head assembly according to claim 1, in which said spray orifice (1) has a diameter of 0.3 mm.

8. (previously presented): A set of spray head assemblies according to claim 1, wherein the spray head of each spray head assembly is manufactured from a common mold cavity.

9. (previously presented): A set of spray head assemblies according to claim 8, in which the standard deviation of the offset of the central axis (X) of the insert (20) relative to the central axis (Y) of the expulsion channel (5) for any spray head coming from a common mold cavity is less than 0.05 mm, and advantageously less than 0.02 mm.

10. (previously presented): A fluid dispenser device characterized in that it includes a spray head assembly according to claim 1.

11. (currently amended): A fluid spray head assembly, comprising:

a spray head comprising an expulsion channel, a spray orifice and a spray profile formed in an end wall of the spray head, the spray profile comprising spray channels opening out to a central spray chamber disposed upstream from the spray orifice;

an insert disposed in the expulsion channel so as to form a base surface for the spray profile, the insert forming an internal nozzle, the spray head configured with an upstream opening to permit the insert to be introduced inside the spray head only from the upstream

opening in the spray head, and wherein, a central axis of the insert is substantially identical to a central axis of the expulsion channel; and

at least one radial projection extending from an inside wall of the expulsion channel and abutting the insert so as to substantially align the central axis of the insert with the central axis of the expulsion channel;

wherein the at least one radial projection extends from the inside wall at a location ~~immediately~~directly adjacent to a top end of the insert, wherein the top end of the insert faces the spray profile formed in the end wall of the spray head;

wherein the central spray chamber is between the spray orifice of the spray head and the insert;

wherein the insert is formed separately from the spray head.

12. (previously presented): The fluid spray head assembly according to claim 11, wherein the spray channels are non-radial.

13. (previously presented): The fluid spray head assembly according to claim 11, further comprising at least two additional projections extending from the inside wall of the expulsion channel and abutting the insert so as to substantially align the central axis of the insert with the central axis of the expulsion channel.

14. (previously presented): The fluid spray head assembly according to claim 11, further

comprising at least two additional projections extending from the inside wall of the expulsion channel, and wherein a diameter of an inscribed circle defined by the three projections is substantially identical to a diameter of the insert.

15. (previously presented): The fluid spray head assembly according to claim 14, wherein the three projections define three flat surfaces distributed symmetrically about the central axis of the explusion channel.

16. (previously presented): The fluid spray head assembly according to claim 14, wherein access from the expulsion channel to the spray channels is between the projections.

17. (previously presented): The fluid spray head assembly according to claim 1, wherein the spray head is configured to couple to a dispensing member.

18. (previously presented): The fluid spray head assembly according to claim 11, wherein the fluid spray head is configured to couple to a dispensing member.

19. (previously presented): A spray head assembly according to claim 1, in which said centering means comprise three projections (30), the diameter of the inscribed circle defined by said projections being substantially identical to the diameter of the insert (20).

20. (currently amended): A spray head assembly according to claim 1, wherein the centering means contacts the insert at the location ~~immediately~~directly adjacent to the top end of the insert.